

Claims

- [c1] What is claimed is:
1. A method for filtering packets in a wireless network system, the wireless network system comprising a wireless access point wirelessly communicating with a plurality of first nodes, each of the first nodes delivering data to the access point by transmitting packets, each of the packets having a header for recording a first address code, the access point comprising a first list for storing a plurality of first addresses, a receiving module for receiving the packets transmitted from the first nodes, an identifying module for comparing the first address codes of the packets received from the receiving module with the first addresses of the first list, and a transmitting module for delivering data to a plurality of second nodes via a local area network, the method comprising:
 - (a) utilizing one of the first nodes to transmit a first packet to the access point;
 - (b) utilizing the receiving module to receive the first packet transmitted from the first node;
 - (c) utilizing the identifying module to compare the first address code of the first packet with the first addresses of the first list; and
 - (d) utilizing the transmitting module to transmit the first packet to one of the second nodes if the first address code of the first packet corresponds to one of the first addresses of the first list.
 - [c2] 2. The method of claim 1 wherein the first address code recorded in the header of each packet is used to indicate which first node transmits the packet.
 - [c3] 3. The method of claim 2 wherein the header of each packet further records a second address code for indicating where the packet should be transmitted, and the access point further comprises a second list for storing a plurality of second addresses, the identifying module compares the second address code of the first packet with the second addresses of the second list in the step (c), and the transmitting module transmits the first packet to one of the second nodes in the step (d) if the first address code of the first packet corresponds to one of the first addresses of the first list and if the second address code of the first packet corresponds to one of the second addresses of the second list.

- [c4] 4.The method of claim 1 wherein the first address code recorded in the header of each packet is used to indicate where the packet should be transmitted.
- [c5] 5.The method of claim 1 wherein the access point is positioned in a medium access control (MAC) layer of the wireless network system.
- [c6] 6.The method of claim 1 wherein the first nodes and the second nodes are positioned in a physical layer of the wireless network system.